What is claimed is:

1. A thermal control variable-speed circuit without switching noise, connected with a driving circuit, for controlling the rotation speed of a fan motor, comprising:

a reference voltage output circuit, which is connected to a power supply and outputs a corresponding reference voltage signal according to ambient temperature changes, wherein an output end of said reference voltage output circuit is connected to a first resistor in series and to a second resistor in parallel; and

a driving voltage control circuit, which receives said reference voltage signal and outputs a corresponding driving voltage according to the amplitude of said reference voltage signal, said driving voltage being used to control the rotation speed of said fan motor.

2. The thermal control variable-speed circuit without switching noise as claimed in claim 1, wherein said reference voltage output circuit further comprises:

a third resistor having one end connected to a power supply;

a fourth resistor having one end connected to the other end of said third resistor; and

a thermistor with a negative temperature coefficient, which has one end connected to the other end of said fourth resistor and the other end grounded;

wherein said first resistor has one end connected between said fourth resistor and said thermistor, and the other end outputting said reference voltage signal; and said second resistor has one end connected to an output end of said first resistor and the other end grounded.

3. The thermal control variable-speed circuit without switching noise as claimed in claim 1, wherein said second resistor is a variable resistor.

4. The thermal control variable-speed circuit without switching noise as claimed in

claim 1, wherein said driving voltage control circuit further comprises:

an operational amplifier having a non-inverted input end connected to an output end of said reference voltage output circuit for receiving said reference voltage signal;

a fifth resistor connected between an inverted input end of said operational amplifier and an output end of said operational amplifier;

a sixth resistor connected between the inverted input end of said operational amplifier and ground; and

a transistor having a base connected to an output end of said operational amplifier, a collector connected to a power supply, and an emitter for outputting said driving voltage.

5. The thermal control variable-speed circuit without switching noise as claimed in claim 1, further comprising a capacitor connected to a power supply end of said fan motor for filtering noises.